



PTO/SB/21 (09-04)

Handwritten initials

TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Application Number	10/670,997
Filing Date	September 24, 2003
First Named Inventor	Sebastian J. Maerkl
Art Unit	3753
Examiner Name	Stephen M. Hepperle
Attorney Docket Number	20174C-009410US

Total Number of Pages in This Submission

ENCLOSURES (Check all that apply)

<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/ Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): SB/08 169 references Return Postcard
<input type="checkbox"/> Remarks		The Commissioner is authorized to charge any additional fees to Deposit Account 20-1430.

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	Townsend and Townsend and Crew LLP		
Signature	<i>Patrick M. Boucher</i>		
Printed name	Patrick M. Boucher		
Date	October 31, 2005	Reg. No.	44,037

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below.

Signature	<i>Janet L. Newmaker</i>		
Typed or printed name	Janet L. Newmaker	Date	October 31, 2005

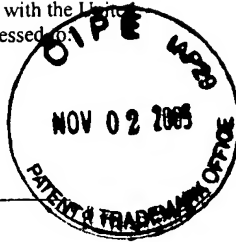
I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to:

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

On October 31, 2005

TOWNSEND and TOWNSEND and CREW LLP

By: Janet L. Newmaker
Janet L. Newmaker



PATENT

Attorney Docket No.: 20174C-009410US

Client Reference Nos.: CIT 3764
and C185.210.US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Sebastian J. Maerkl et al.

Application No.: 10/670,997

Filed: September 24, 2003

For: Microfluidic Large Scale
Integration

Customer No.: 20350

Confirmation No.: 4522

Examiner: Stephen M. Hepperle

Art Unit: 3753

**SUPPLEMENTAL INFORMATION
DISCLOSURE STATEMENT UNDER
37 CFR §§ 1.97 AND 1.98**

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

The references cited on attached form PTO/SB/08A and PTO/SB/08B are being called to the attention of the Examiner. Copies of the non-US references (in compliance with the requirements of 1287 OG 163) are enclosed.

It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

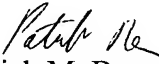
As provided for by 37 CFR 1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

This IDS is being filed before the mailing date of the final Office Action or Notice of Allowance.

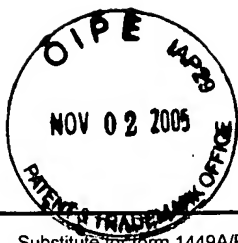
Please charge the IDS fee of \$180 to Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account. A duplicate copy of this Statement is enclosed for that purpose.

Respectfully submitted,

Date: October 31, 2005


Patrick M. Boucher
Reg. No. 44,037

TOWNSEND and TOWNSEND and CREW LLP
Two Embarcadero Center, Eighth Floor
San Francisco, CA 94111-3834
Tel: 303-571-4000
Fax: 415-576-0300
PMB/jln
60614391 v1



PTO/SB/08A (08-03)

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)			Complete if Known		
			Application Number	10/670,997	
			Filing Date	September 24, 2003	
			First Named Inventor	Sebastian J. Maerkl	
			Art Unit	3753	
			Examiner Name	Stephen M. Hepperle	
Sheet	1	of	13	Attorney Docket Number	20174C-009410US

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Kind Code ² (if known)			
	A1	US-3,570,515	03-16-1971	Kinner	
	A2	US-3,747,628	07-24-1973	Holster et al.	
	A3	US-4,046,159	09-06-1977	Pegourie	
	A4	US-4,119,368	10-10-1978	Yamakazi	
	A5	US-4,153,855	05-08-1979	Feingold	
	A6	US-4,245,673	01-20-1981	Bouteille et al.	
	A7	US-4,434,704	03-06-1984	Surjaatmadja	
	A8	US-4,898,582	02-06-1990	Faste	
	A9	US-4,992,312	02-12-1991	Frisch	
	A10	US-5,085,562	02-04-1992	Van Lintel	
	A11	US-5,088,515	02-18-1992	Kamen	
	A12	US-5,096,388	03-17-1992	Weinberg	
	A13	US-5,126,115	06-30-1992	Fujita et al.	
	A14	US-5,164,558	11-17-1992	Huff et al.	
	A15	US-5,171,132	12-15-1992	Miyazaki	
	A16	US-5,224,843	07-06-1993	Van Lintel	
	A17	US-5,259,737	11-09-1993	Kamisuki et al.	
	A18	US-5,265,327	11-30-1993	Faris et al.	
	A19	US-5,290,240	03-01-1994	Horres, Jr.	
	A20	US-5,336,062	08-09-1994	Richter	
	A21	US-5,346,372	09-13-1994	Naruse et al.	
	A22	US-5,375,979	12-27-1994	Trah	
	A23	US-5,376,252	12-27-1994	Ekstrom	
	A24	US-5,400,741	03-28-1995	DeTitta et al.	
	A25	US-5,423,287	06-13-1995	Usami et al.	
	A26	US-5,529,465	06-25-1996	Zengerle et al.	
	A27	US-5,593,130	01-14-1997	Hansson et al.	
	A28	US-5,642,015	06-24-1997	Whitehead et al.	

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² Kind Codes of U.S. Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT***(use as many sheets as necessary)*Sheet **2** of **13****Complete if Known**

Application Number	10/670,997
Filing Date	September 24, 2003
First Named Inventor	Sebastian J. Maerkl
Art Unit	3753
Examiner Name	Stephen M. Hepperle
Attorney Docket Number	20174C-009410US

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Kind Code ² (if known)			
	A29	US-5,659,171	08-19-1997	Young et al.	
	A30	US-5,660,370	08-26-1997	Webster	
	A31	US-5,705,018	01-06-1998	Hartley	
	A32	US-5,759,014	06-02-1998	Van Lintel	
	A33	US-5,788,468	08-04-1998	Dewa et al.	
	A34	US-5,836,750	11-17-1998	Cabuz	
	A35	US-5,842,787	12-01-1998	Kopf-Sill et al.	
	A36	US-5,875,817	03-02-1999	Carter	
	A37	US-5,876,187	03-02-1999	Afromowitz	
	A38	US-5,932,799	08-03-1999	Moles	
	A39	US-5,942,443	08-24-1999	Parce et al.	
	A40	US-6,007,309	12-28-1999	Hartley	
	A41	US-6,043,080	03-28-2000	Lipshutz et al.	
	A42	US-6,123,769	09-26-2000	Sanjoh	
	A43	US-6,155,282	12-05-2000	Zachary et al.	
	A44	US-6,174,365 B1	01-16-2001	Sanjoh	
	A45	US-6,296,673 B1	10-02-2001	Santarsiero et al.	
	A46	US-2001/0027745 A1	10-11-2001	Weigl et al.	
	A47	US-6,345,502 B1	02-12-2002	Tai et al.	
	A48	US-6,409,832 B2	06-25-2002	Weigl et al.	
	A49	US-6,767,706 B2	07-27-2004	Quake et al.	

Examiner
SignatureDate
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² Kind Codes of U.S. Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/670,997
				Filing Date	September 24, 2003
				First Named Inventor	Sebastian J. Maerkl
				Art Unit	3753
				Examiner Name	Stephen M. Hepperle
Sheet	3	of	13	Attorney Docket Number	20174C-009410US

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)				
	B1	EP	0 592 094	A2	04-13-1994	International Business Machines Corporation		<input type="checkbox"/>
	B2	EP	0 703 364	A1	03-27-1996	Fraunhofer-Gesellschaft Zur Förderung Der Angewandten Forschung E.V.		<input type="checkbox"/>
	B3	EP	0 706 004	A2	04-10-1996	Bayer Corporation		<input type="checkbox"/>
	B4	EP	0 779 436	A2	06-18-1997	Frank T. Hartley		<input type="checkbox"/>
	B5	EP	0 829 360	A2	03-18-1998	Xerox Corporation		<input type="checkbox"/>
	B6	EP	0 845 603	A1	06-03-1998	Xerox Corporation		<input type="checkbox"/>
	B7	EP	0 999 055	A2	05-10-2000	Samsung Electronics Co., Ltd.		<input type="checkbox"/>
	B8	GB	2 155 152	A	09-18-1985	Allied Corporation		<input type="checkbox"/>
	B9	GB	2 308 460	A	06-25-1997	Daewoo Electronics Co., Ltd.		<input type="checkbox"/>
	B10	WO	98/07069	A1	02-19-1998	The Regents Of The University Of Michigan		<input type="checkbox"/>
	B11	WO	99/00655	A2	01-07-1999	Immunetics		<input type="checkbox"/>
	B12	WO	99/04361	A1	01-28-1999	Diversified Scientific, Inc.		<input type="checkbox"/>
	B13	WO	99/17093	A1	04-08-1999	The Regents Of The University Of Michigan		<input type="checkbox"/>
	B14	WO	99/52633	A1	10-21-1999	Lumenal Technologies, L.P.		<input type="checkbox"/>
	B15	WO	00/00678	A1	01-06-2000	University Of Washington		<input type="checkbox"/>
	B16	WO	00/43748	A1	07-27-2000	YSI Incorporated		<input type="checkbox"/>
	B17	WO	00/60345	A1	10-12-2000	University Of Alabama At Birmingham Research Foundation		<input type="checkbox"/>
	B18	WO	01/09595	A2	02-08-2001	Emerald Biostructures, Inc.		<input type="checkbox"/>
	B19	WO	01/09595	A3	02-08-2001	Emerald Biostructures, Inc.		<input type="checkbox"/>

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² Kind Codes of U.S. Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>			Complete if Known		
			Application Number	10/670,997	
			Filing Date	September 24, 2003	
			First Named Inventor	Sebastian J. Maerkl	
			Art Unit	3753	
			Examiner Name	Stephen M. Hepperle	
Sheet	4	of	13	Attorney Docket Number	20174C-009410US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	C1	"Biochips," Nature Biotechnology, Vol. 18, Supplement 2000, pp. IT43-IT44, 2000	
	C2	"Chapter 9: Microfluidic Devices," Micromachined Transducers Sourcebook, pp. 779-882, 1998	
	C3	"Electro Microfluidic Dual In-Line Package (EMDIP)," Sandia National Laboratories, 2 pages, no date	
	C4	"Last Chance For Micromachines," The Economist Technology Quarterly, printed from website http://www.economist.com/science/displayStory.cfm?Story_ID=442930 on 1/25/2001, 8 pages, 12/7/2000	
	C5	"The Liver Chip," Technology Review, pp. 64-67, 3/2003	
	C6	AHN, CHONG H. et al., "Fluid Micropumps Based On Rotary Magnetic Actuators," Proceedings of 1995 IEEE Micro Electro Mechanical Systems Workshop (MEMS '95), Amsterdam, Netherlands, pp. 408-412, 1/29-2/2/1995	
	C7	ANDERSON, ROLFE C. et al., "Microfluidic Biochemical Analysis System," Transducers '97, 1997 International Conference on Solid-State Sensors and Actuators, Chicago, Illinois, pp. 477-480, 6/16-19/1997	
	C8	ANGELL, JAMES B. et al., "Silicon Micromechanical Devices," Scientific American, pp. cover, 44-55, 4/1983	
	C9	ARMANI, DENIZ et al., "Re-Configurable Fluid Circuits By PDMS Elastomer Micromachining," IEEE Int. Conf. Micro Electro Mech. Syst. Tech. Digest, Vol. 12, pp. 222-227, 1999	
	C10	ASHKIN, A. et al., "Optical Trapping And Manipulation Of Single Cells Using Infrared Laser Beams," Nature, Vol. 330, No. 24, pp. 769-771, 12/31/1987	
	C11	ASHKIN, A. et al., "Optical Trapping And Manipulation Of Viruses And Bacteria," Science, Vol. 235, pp. 1517-1520, 3/20/1987	
	C12	BALLANTYNE, J. P. et al., "Selective Area Metallization By Electron-Beam Controlled Direct Metallic Deposition," J. Vac. Sci. Technol., Vol. 10, No. 6, pp. 1094-1097, 11/1973	
	C13	BENARD, W. L. et al., "A Titanium-Nickel Shape-Memory Alloy Actuated Micropump," Transducers '97, 1997 International Conference on Solid-State Sensors and Actuators, Chicago, Illinois, pp. 361-364, 6/16-19/1997	
	C14	BLACK, HARVEY, "Tiny Technology Promises Tremendous Profits," The Scientist, Vol. 15, No. 21, 4 pages, 10/29/2001	
	C15	BLOOMSTEIN, T. M. et al., "Laser-Chemical Three-Dimensional Writing For Microelectromechanics And Application To Standard-Cell Microfluidics," J. Vac. Sci. Technol. B, Vol. 10, No. 6, pp. 2671-2674, 11/1992	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Complete if Known	
				Application Number	10/670,997
				Filing Date	September 24, 2003
				First Named Inventor	Sebastian J. Maerkl
				Art Unit	3753
				Examiner Name	Stephen M. Hepperle
Sheet	5	of	13	Attorney Docket Number	20174C-009410US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	C16	BOUSSE, LUC et al., "Electrokinetically Controlled Microfluidic Analysis Systems," Annu. Rev. Biophys. Biomol. Struct., Vol. 29, pp. 155-181, 2000	
	C17	BRECHTEL, R. et al., "Control Of The Electroosmotic Flow By Metal-Salt-Containing Buffers," Journal of Chromatography A, Vol. 716, pp. 97-105, 1995	
	C18	BRYZEK, JANUSZ et al., "Micromachines On The March", IEEE Spectrum, Vol. 31, No. 5, pp. 20-31, 5/1994	
	C19	BUCHAILLOT, LIONEL et al., "Silicon Nitride Thin Films Young's Modulus Determination By An Optical Non Destructive Method," Jpn. J. Appl. Phys., Vol. 36, Part 2, No. 6B, pp. L794-L797, 6/15/1997	
	C20	BUICAN, TUDOR N. et al., "Automated Single-Cell Manipulation And Sorting By Light Trapping," Applied Optics, Vol. 26, No. 24, pp. 5311-5316, 12/15/1987	
	C21	BURBAUM, JONATHAN J. et al., "New Technologies For High-Throughput Screening," Current Opinion in Chemical Biology, Vol. 1, pp. 72-78, 1997	
	C22	CAI, WEIWEN, et al., "High-Resolution Restriction Maps Of Bacterial Artificial Chromosomes Constructed By Optical Mapping," Proc. Natl. Acad. Sci. USA, Vol. 95, pp. 3390-3395, 3/1998	
	C23	CALKINS, KATHRYN, "Mycometrix: Rubber Chips," BioCentury, 2 pages, 10/16/2000	
	C24	CASTRO, ALONSO et al., "Fluorescence Detection And Size Measurement Of Single DNA Molecules," Analytical Chemistry, Vol. 85, No. 7, pp. 849-852, 4/1/1993	
	C25	CHANG, JUN KEUN et al., "Functional Integration Of Serial Dilution And Capillary Electrophoresis On A PDMS Microchip," Biotechnology and Bioprocess Engineering, Vol. 8, No. 4, pp. 233-239, 2003	
	C26	CHEN, CHICHEN et al., "Gray-Scale Photolithography Using Microfluidic Photomasks," PNAS, Vol. 100, No. 4, pp. 1499-1504, 2/18/2003	
	C27	CHIU, CHI-SUNG et al., "Single Molecule Measurements Calibrate Green Fluorescent Protein Surface Densities On Transparent Beads For Use With 'Knock-In' Animals And Other Expression Systems," Journal of Neuroscience Methods, Vol. 105, pp. 55-63, 2001	
	C28	CHIU, DANIEL T. et al., "Patterned Deposition Of Cells And Proteins Onto Surfaces By Using Three-Dimensional Microfluidic Systems," PNAS, Vol. 97, No. 6, pp. 2408-2413, 3/14/2000	
	C29	CHOU, HOU-PU et al., "A Microfabricated Device For Sizing And Sorting DNA Molecules," Proc. Natl. Acad. Sci., Vol. 96, pp. 11-13, 1/1999	
	C30	CHOU, HOU-PU et al., "A Microfabricated Rotary Pump," Biomedical Microdevices, Vol. 3, No. 4, pp. 323-330, 2001	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)			Complete if Known		
			Application Number	10/670,997	
			Filing Date	September 24, 2003	
			First Named Inventor	Sebastian J. Maerkl	
			Art Unit	3753	
			Examiner Name	Stephen M. Hepperle	
Sheet	6	of	13	Attorney Docket Number	20174C-009410US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	C31	CHOU, HOU-PU et al., "Integrated Elastomer Fluidic Lab-On-A-Chip-Surface Patterning And DNA Diagnostics," Proceedings of the Solid State Actuator and Sensor Workshop, Hilton Head, South Carolina, 4 pages, 2000	
	C32	CHOU, HOU-PU et al., "Multiple Disease Diagnostics On A Single Chip," Biophysics Lab, Caltech, pp. 1-4, 3/1/2000	
	C33	DELAMARCHE, EMMANUEL et al., "Patterned Delivery Of Immunoglobulins To Surfaces Using Microfluidic Networks," Science, Vol. 276, pp. 779-781, 5/2/1997	
	C34	DUFFY, DAVID C. et al., "Patterning Electroluminescent Materials With Feature Sizes As Small As 5µm Using Elastomeric Membranes As Masks For Dry Lift-Off," Advanced Materials, Vol. 11, No. 7, pp. 546-552, 1999	
	C35	DUFFY, DAVID C. et al., "Rapid Prototyping Of Microfluidic Switches In Poly(dimethyl siloxane) And Their Actuation By Electro-Osmotic Flow," J. Micromech. Microeng., Vol. 9, pp. 211-217, 1999	
	C36	DUFFY, DAVID C. et al., "Rapid Prototyping Of Microfluidic Systems In Poly(dimethylsiloxane)," Analytical Chemistry, Vol. 70, No. 23, pp. 4974-4984, 12/1/1998	
	C37	EFFENHAUSER, CARLO S. et al., "Integrated Capillary Electrophoresis On Flexible Silicone Microdevices: Analysis Of DNA Restriction Fragments And Detection Of Single DNA Molecules On Microchips," Analytical Chemistry, Vol. 69, No. 17, pp. 3451-3457, 9/1/1997	
	C38	EFFENHAUSER, CARLO S. et al., "Integrated Chip-Based Capillary Electrophoresis," Electrophoresis, Vol. 18, pp. 2203-2213, 1997	
	C39	EYAL, SHULAMIT et al., "Velocity-Independent Microfluidic Flow Cytometry," Electrophoresis, Vol. 23, pp. 2653-2657, 2002	
	C40	FAHRENBERG, J. et al., "A Microvalve System Fabricated By Thermoplastic Molding," J. Micromech. Microeng., Vol. 5, pp. 169-171, 1995	
	C41	FETTINGER, J. C. et al., "Stacked Modules For Micro Flow Systems In Chemical Analysis: Concept And Studies Using An Enlarged Model," Sensors and Actuators B, Vol. 17, pp. 19-25, 1993	
	C42	FITZGERALD, DEBORAH A., "Making Every Nanoliter Count," The Scientist, Vol. 15, No. 21, 8 pages, 10/29/2001	
	C43	FOLCH, A. et al., "Molding Of Deep Polydimethylsiloxane Microstructures For Microfluidics And Biological Applications," Journal of Biomechanical Engineering, Vol. 121, pp. 28-34, 2/1999	
	C44	FU, ANNE Y. et al., "A Microfabricated Fluorescence-Activated Cell-Sorter," Nature Biotechnology, Vol. 17, pp. 1109-1111, 11/1999	
	C45	GALAMBOS, PAUL et al., "Electrical And Fluidic Packaging Of Surface Micromachined Electro-Microfluidic Devices," 8 pages, no date	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Complete if Known	
				Application Number	10/670,997
				Filing Date	September 24, 2003
				First Named Inventor	Sebastian J. Maerkl
				Art Unit	3753
				Examiner Name	Stephen M. Hepperle
Sheet	7	of	13	Attorney Docket Number	20174C-009410US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	C46	GAO, JUN et al., "Integrated Microfluidic System Enabling Protein Digestion, Peptide Separation, And Protein Identification," Analytical Chemistry, Vol. 73, No. 11, pp. 2648-2655, 6/1/2001	
	C47	GARNO, JAYNE C. et al., "Production Of Periodic Arrays Of Protein Nanostructures Using Particle Lithography," Langmuir, Vol. 18, No. 21, pp. 8186-8192, 2002	
	C48	GASS, V. et al., "Integrated Flow-Regulated Silicon Micropump," Sensors and Actuators A, Vol. 43, pp. 335-338, 1994	
	C49	GERLACH, TORSTEN, "Pumping Gases By A Silicon Micro Pump With Dynamic Passive Valves," Transducers '97, 1997 International Conference on Solid-State Sensors and Actuators, Chicago, Illinois, pp. 357-360, 6/16-19/1997	
	C50	GOLL, C. et al., "Microvalves With Bistable Buckled Polymer Diaphragms," J. Micromech. Microeng., Vol. 6, pp. 77-79, 1996	
	C51	GRAVESEN, PETER et al., "Microfluidics-A Review," J. Micromech. Microeng., Vol. 3, pp. 168-192, 1993	
	C52	GREENE, CHANA, "Characterizing The Properties Of PDMS," pp. 1-11, Summer 2000	
	C53	GROVER, WILLIAM H. et al., "Monolithic Membrane Valves And Diaphragm Pumps For Practical Large-Scale Integration Into Glass Microfluidic Devices," Sensors and Actuators B, Vol. 89, pp. 315-323, 2003	
	C54	GUÉRIN, L. J. et al., "Simple And Low Cost Fabrication Of Embedded Micro-Channels By Using A New Thick-Film Photoplastic," Transducers '97, 1997 International Conference on Solid-State Sensors and Actuators, Chicago, Illinois, pp. 1419-1422, 6/18-19/1997	
	C55	HANSEN, CARL. L. et al., "A Robust And Scalable Microfluidic Metering Method That Allows Protein Crystal Growth By Free Interface Diffusion," PNAS, Vol. 99, No. 26, pp. 16531-16536, 12/24/2002	
	C56	HARRISON, D. JED et al., "Micromachining A Miniaturized Capillary Electrophoresis-Based Chemical Analysis System On A Chip," Science, Vol. 261, pp. 895-897, 8/13/1993	
	C57	HICKS, JENNIFER, "Genetics And Drug Discovery Dominate Microarray Research," R&D Magazine, pp. 28-33, 2/1999	
	C58	HOFMANN, OLIVER et al., "Modular Approach To Fabrication Of Three-Dimensional Microchannel Systems In PDMS - Application To Sheath Flow Microchips," Lab on a Chip, Vol. 1, pp. 108-114, 2001	
	C59	HORN, HOWARD, "Lab Chips Sector: Microtechnologies Are Changing Healthcare And More," Life Sciences, pp. 19-21, 3/20/2001	
	C60	HORNBECK, LARRY J. et al., "Bistable Deformable Mirror Device," Spatial Light Modulators and Applications 1988 Technical Digest Series, Summaries of papers presented at the Spatial Light Modulators and Applications Topical Meeting, Optical Society of America, Vol. 8, Postconference Edition, A215, pp. 107-110, 6/15-17/1988	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)			Complete if Known		
			Application Number	10/670,997	
			Filing Date	September 24, 2003	
			First Named Inventor	Sebastian J. Maerkl	
			Art Unit	3753	
			Examiner Name	Stephen M. Hepperle	
Sheet	8	of	13	Attorney Docket Number	20174C-009410US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	C61	HOSOKAWA, KAZUO et al., "A Microfluidic Device For Mixing Of Capillary-Drive Liquids," IEEJ Trans. SM, Vol. 123, No. 1, pp. 23-24, 2003	
	C62	HOSOKAWA, KAZUO et al., "Handling Of Picoliter Liquid Samples In A Poly(dimethylsiloxane)-Based Microfluidic Device," Analytical Chemistry, Vol. 71, No. 20, pp. 4781-4785, 10/15/1999	
	C63	IKUTA, KOJI et al., "Three Dimensional Micro Integrated Fluid Systems (MIFS) Fabricated By Stereo Lithography," IEEE, pp. 1-6, 1994	
	C64	JACOBSON, STEPHEN C. et al., "High-Speed Separations On A Microchip," Analytical Chemistry, Vol. 66, No. 7, pp. 1114-1118, 4/1/1994	
	C65	JACOBSON, STEPHEN C. et al., "Microfluidic Devices For Electrokinetically Driven Parallel And Serial Mixing," Analytical Chemistry, Vol. 71, No. 20, pp. 4455-4459, 10/15/1999	
	C66	JERMAN, HAL, "Electrically-Activated, Normally-Closed Diaphragm Valves," Transducers '91, 1991 International Conference on Solid-State Sensors and Actuators, pp. cover, 1045-1048, 1991	
	C67	JO, BYUNG-HO et al., "Fabrication Of Three-Dimensional Microfluidic Systems By Stacking Molded Polydimethylsiloxane (PDMS) Layers" SPIE, Vol. 3877, pp. 222-229, 9/1999	
	C68	JO, BYUNG-HO et al., "Three-Dimensional Micro-Channel Fabrication In Polydimethylsiloxane (PDMS) Elastomer," Journal of Microelectromechanical Systems, Vol. 9, No. 1, pp. 76-81, 3/2000	
	C69	JUNG, D. R. et al., "Chemical And Physical Interactions At Metal/Self-Assembled Organic Monolayer Interfaces," pp. 1-54, 1994	
	C70	KAGAN, C. R., "Organic-Inorganic Hybrid Materials As Semiconducting Channels In Thin-Film Field-Effect Transistors," Science, Vol. 286, pp. 945-947, 10/29/1999	
	C71	KAPUR, RAVI et al., "Fabrication And Selective Surface Modification Of 3-Dimensionally Textured Biomedical Polymers From Etched Silicon Substrates," Journal of Biomedical Materials Research, Vol. 33, pp. 205-216, 1996	
	C72	KELLER, RICHARD A. et al., "Single-Molecule Fluorescence Analysis In Solution," Applied Spectroscopy, Vol. 50, No. 7, pp. 12A-30A, 7/1996	
	C73	KENIS, PAUL J. A. et al., "Microfabrication Inside Capillaries Using Multiphase Laminar Flow Patterning," Science, Vol. 285, pp. 83-85, 7/2/1999	
	C74	KHOO, MELVIN et al., "A Novel Micromachined Magnetic Membrane Microfluid Pump," pp. 1-4, no date	
	C75	KIM, ENOCH et al., "Micromolding In Capillaries: Applications In Materials Science," J. Am. Chem. Soc., Vol. 118, No. 24, pp. 5722-5731, 1996	
	C76	KIM, ENOCH et al., "Polymer Microstructures Formed By Moulding In Capillaries," Nature, Vol. 376, pp. 581-584, 8/17/1995	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Complete if Known	
				Application Number	10/670,997
				Filing Date	September 24, 2003
				First Named Inventor	Sebastian J. Maerkl
				Art Unit	3753
				Examiner Name	Stephen M. Hepperle
Sheet	9	of	13	Attorney Docket Number	20174C-009410US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	C77	KIRK-OTHMER, "Concise Encyclopedia of Chemical Technology," John Wiley & Sons, 5 pages, no date	
	C78	KOPP, MARTIN U. et al., "Chemical Amplification: Continuous-Flow PCR On A Chip," Science, Vol. 280, pp. 1046-1048, 5/15/1998	
	C79	KUHN, LAWRENCE et al., "Silicon Charge Electrode Array For Ink Jet Printing," IEEE Transactions on Electron Devices, Vol. ED-25, No. 10, pp. 1257-1260, 10/1978	
	C80	KUMAR, AMIT et al., "Features Of Gold Having Micrometer To Centimeter Dimensions Can Be Formed Through A Combination Of Stamping With An Elastomeric Stamp And An Alkanethiol 'Ink' Followed By Chemical Etching," Appl. Phys. Lett., Vol. 63, No. 14, pp. 2002-2004, 10/4/1993	
	C81	KUMAR, AMIT et al., "Patterning Self-Assembled Monolayers: Applications In Materials Science," Langmuir, Vol. 10, pp. 1498-1511, 1994	
	C82	LAGALLY, ERIC T. et al., "Fully Integrated PCR-Capillary Electrophoresis Microsystem For DNA Analysis," Lab On A Chip, Vol. 1, pp. 102-107, 2001	
	C83	LAGALLY, ERIC T. et al., "Monolithic Integrated Microfluidic DNA Amplification And Capillary Electrophoresis Analysis System," Sensors and Actuators B, Vol. 63, pp. 138-146, 2000	
	C84	LAGALLY, E. T. et al., "Single-Molecule DNA Amplification And Analysis In An Integrated Microfluidic Device," Analytical Chemistry, Vol. 73, No. 3, pp. 565-570, 2/1/2001	
	C85	LAMMERINK, T. S. J. et al., "Modular Concept For Fluid Handling Systems," IEEE, pp. 389-394, 1996	
	C86	LESSARD, GUILLAUME A. et al., "A Scanning Apertureless Fluorescence Microscope," 8 pages, no date	
	C87	LI, PAUL C. H. et al., "Transport, Manipulation, And Reaction Of Biological Cells On-Chip Using Electrokinetic Effects," Analytical Chemistry, Vol. 69, No. 8, pp. 1564-1568, 4/15/1997	
	C88	LICKLIDER, LARRY et al., "A Micromachined Chip-Based Electrospray Source For Mass Spectrometry," Analytical Chemistry, Vol. 72, No. 2, pp. 367-375, 1/15/2000	
	C89	LIN, L. Y. et al., "Free-Space Micromachined Optical Switches For Optical Networking," IEEE Journal of Selected Topics in Quantum Electronics, Vol. 5, No. 1, pp. 4-9, 1/1999	
	C90	LIU, JIAN et al., "A Nanoliter Rotary Device For Polymerase Chain Reaction," Electrophoresis, Vol. 23, pp. 1531-1536, 2002	
	C91	LÖTTERS, J C et al., "The Mechanical Properties Of The Rubber Elastic Polymer Polydimethylsiloxane For Sensor Applications," J. Micromech. Microeng., Vol. 7, pp. 145-147, 1997	
	C92	LUCY, CHARLES A. et al., "Characterization Of The Cationic Surfactant Induced Reversal Of Electroosmotic Flow In Capillary Electrophoresis," Anal. Chem., Vol. 68, pp. 300-305, 1996	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)			Complete if Known		
			Application Number	10/670,997	
			Filing Date	September 24, 2003	
			First Named Inventor	Sebastian J. Maerkl	
			Art Unit	3753	
			Examiner Name	Stephen M. Hepperle	
Sheet	10	of	13	Attorney Docket Number	20174C-009410US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	C93	MALUF, N., "An Introduction To Microelectromechanical Systems Engineering," Artech House Publishers, Boston London, pp. 42-45, 12/1999	
	C94	MANZ, A. et al., "Micromachining Of Monocrystalline Silicon And Glass For Chemical Analysis Systems," Trends in Analytical Chemistry, Vol. 10, No. 5, pp. 144-149, 1991	
	C95	MARSHALL, SID, "Fundamental Changes Ahead For Lab Instrumentation," R&D Magazine, 5 pages, 2/1999	
	C96	MARSILI, RAY, "Lab-On-A-Chip Poised To Revolutionize Sample Prep," R&D Magazine, 5 pages, 2/1999	
	C97	MCDONALD, J. COOPER et al., "Fabrication Of Microfluidic Systems In Poly(dimethylsiloxane)," Electrophoresis, Vol. 21, pp. 27-40, 2000	
	C98	MCDONALD, J. COOPER et al., "Poly(dimethylsiloxane) As A Material For Fabricating Microfluidic Devices," Accounts of Chemical Research, Vol. 35, No. 7, pp. 491-499, 2002	
	C99	MULLER, RICHARD S. et al., "Surface-Micromachined Microoptical Elements And Systems," Proceedings of the IEEE, Vol. 86, No. 8, pp. 1705-1720, 8/1998	
	C100	NG, JESSAMINE M. K. et al., "Components For Integrated Poly(Dimethylsiloxane) Microfluidic Systems," Electrophoresis, Vol. 23, pp. 3461-3473, 2002	
	C101	OLESCHUK, RICHARD D. et al., "Analytical Microdevices For Mass Spectrometry," Trends In Analytical Chemistry, Vol. 19, No. 6., pp. 379-388, 2000	
	C102	OLSSON, ANDERS et al., "Simulation Studies Of Diffuser And Nozzle Elements For Valve-Less Micropumps," Transducers '97, 1997 International Conference on Solid-State Sensors and Actuators, Chicago, Illinois, pp. 1039-1042, 6/16-19/1997	
	C103	PETHIG, RONALD et al., "Applications Of Dielectrophoresis In Biotechnology," Tibtech, Vol. 15, pp. 426-432, 10/1997	
	C104	QIN, DONG et al., "Elastomeric Light Valves," Adv. Mater., Vol. 9, No. 5, pp. 407-410, 1997	
	C105	QIN, DONG et al., "Photolithography With Transparent Reflective Photomasks," J. Vac. Sci. Technol. B, Vol. 16, No. 1, pp. 98-103, 1/1998	
	C106	QUAKE, STEPHEN R. et al., "From Micro- To Nanofabrication With Soft Materials," Science, Vol. 290, pp. 1536-1540, 11/24/2000	
	C107	RAPP, R. et al., "LIGA Micropump For Gases And Liquids," Sensors and Actuators A, Vol. 40, pp. 57-61, 1/1994	
	C108	ROYLANCE, LYNN MICHELLE et al., "A Batch-Fabricated Silicon Accelerometer," IEEE Transactions on Electron Devices, Vol. ED-26, No. 12, pp. 1911-1917, 12/1979	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Complete if Known	
				Application Number	10/670,997
				Filing Date	September 24, 2003
				First Named Inventor	Sebastian J. Maerkl
				Art Unit	3753
				Examiner Name	Stephen M. Hepperle
Sheet	11	of	13	Attorney Docket Number	20174C-009410US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	C109	SAMAD, AKHTAR et al., "Optical Mapping: A Novel, Single-Molecule Approach To Genomic Analysis," Genome Research, pp. 1-4, 1995	
	C110	SANJOH, AKIRA et al., "Spatiotemporal Protein Crystal Growth Studies Using Microfluidic Silicon Devices," Journal of Crystal Growth, Vol. 196, pp. 691-702, 1999	
	C111	SASSERATH, J. et al., "Rapid Prototyping And Development Of Microfluidic And BioMEMS Devices," IVD Technology, 12 pages, 6/2002	
	C112	SCHASFOORT, RICHARD B. M. et al., "Field-Effect Flow Control For Microfabricated Fluidic Networks," Science, Vol. 286, pp. 942-945, 10/29/1999	
	C113	SCHUELLER, OLIVIER J. A. et al., "Fabrication Of Glassy Carbon Microstructures By Soft Lithography," Sensors and Actuators A, Vol. 72, pp. 126-139, 1999	
	C114	SCHWARTZ, DAVID C. et al., "Optical Mapping Approaches To Molecular Genomics," Current Opinion in Biotechnology, Vol. 8, pp. 70-74, 1997	
	C115	SHOJI, SHUICHI, "Fluids For Sensor Systems," Topics in Current Chemistry, Vol. 194, pp. 167-188, 1998	
	C116	SHOJI, SHUICHI et al., "Smallest Dead Volume Microvalves For Integrated Chemical Analyzing Systems," Transducers '91, 1991 International Conference on Solid-State Sensors and Actuators, San Francisco, California, pp. cover, 1052-1055, 1991	
	C117	SMITS, J.G., "Piezoelectric Micropump With Three Valves Working Peristaltically," Sensors and Actuators, Vol. A21-A23, pp. 203-206, 1990	
	C118	SOHN, L. L. et al., "Capacitance Cytometry: Measuring Biological Cells One By One," PNAS, Vol. 97, No. 20, pp. 10687-10690, 9/26/2000	
	C119	THOMPSON, L. F. et al., "Introduction To Microlithography," 185th Meeting of the American Chemical Society, Seattle, WA, pp. 2 cover pages, 1-13, 3/20-25/1983	
	C120	THORSEN, TODD et al., "Dynamic Pattern Formation In A Vesicle-Generating Microfluidic Device," Physical Review Letters, Vol. 86, No. 18, pp. 4163-4166, 4/30/2001	
	C121	THORSEN, TODD et al., "Microfluidic Large-Scale Integration," Science, Vol. 298, No. 5593, pp. 580-584, 10/18/2002	
	C122	TUFTE, O. N. et al., "Silicon Diffused-Element Piezoresistive Diaphragms," Journal of Applied Physics, Vol. 33, No. 11, pp. 3322-3327, 11/1962	
	C123	Ullmann's Encyclopedia of Industrial Chemistry, Sections 6 to 6.3, Topic: Carbon Black, Sixth Edition, 7 pages, 1999	
	C124	UNGER, MARC A. et al., "Monolithic Microfabricated Valves And Pumps By Multilayer Soft Lithography," Science, Vol. 288, pp. 113-116, 4/7/2000	

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Complete if Known	
				Application Number	10/670,997
				Filing Date	September 24, 2003
				First Named Inventor	Sebastian J. Maerkl
				Art Unit	3753
				Examiner Name	Stephen M. Hepperle
Sheet	12	of	13	Attorney Docket Number	20174C-009410US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	C125	UNGER, MARC A. et al., "Single-Molecule Fluorescence Observed With Mercury Lamp Illumination," Biotechniques, Vol. 27, No. 5, pp. 1008-1014, 11/1999	
	C126	VAN DE POL, F.C.M. et al., "A Thermo-Pneumatic Actuation Principle For A Microminiature Pump And Other Micromechanical Devices," Sensors and Actuators, Vol. 17, Nos. 1-2, pp. 139-143, 5/3/1989	
	C127	VAN DE POL, F.C.M. et al., "Micro Liquid Handling Devices - A Review," Micro Systems Technologies, Vol. 90, pp. 799-805, 1990	
	C128	VAN DEN BERG, A. et al., "Micro Total Analysis Systems," Proceedings of the μ TAS '94 Workshop, University of Twente, The Netherlands, 17 pages, 11/21-22/1994	
	C129	VAN DER WOERD, MARK et al., "Lab-On-A-Chip Based Protein Crystallization," National Aeronautics and Space Administration and Caliper, pp. 1-27, 10/25/2001	
	C130	VAN DER WOERD, MARK et al., "The Promise Of Macromolecular Crystallization In Microfluidic Chips," Journal of Structural Biology, Vol. 142, pp. 180-187, 2003	
	C131	VERPOORTE, ELISABETH M. J. et al., "Three-Dimensional Micro Flow Manifolds For Miniaturized Chemical Analysis Systems," J. Micromech. Microeng., Vol. 7, pp. 246-256, 1994	
	C132	VIEIDER, CHRISTIAN et al., "A Pneumatically Actuated Micro Valve With A Silicon Rubber Membrane For Integration With Fluid Handling Systems," Transducers '95, 8th International Conference on Solid-State Sensors and Actuators and Eurosensors IX, Stockholm, Sweden, pp. 284-286, 6/25-29/1995	
	C133	WASHIZU, MASAO et al., "Molecular Dielectrophoresis Of Biopolymers," IEEE Transactions on Industry Applications, Vol. 30, No. 4, pp. 835-843, 7/1994	
	C134	WHITESIDES, GEORGE M. et al., "Flexible Methods For Microfluidics," Physics Today, pp. 42-48, 6/2001	
	C135	WHITESIDES, GEORGE M. et al., "Soft Lithography In Biology And Biochemistry," Annu. Rev. Biomed. Eng., Vol. 3, pp. 335-373, 2001	
	C136	WILBUR, JAMES L. et al., "Lithographic Molding: A Convenient Route To Structures With Sub-Micrometer Dimensions," Adv. Mater., Vol. 7, No. 7, pp. 649-652, 1995	
	C137	WU, HONGKAI et al., "Fabrication Of Complex Three-Dimensional Microchannel Systems In PDMS," J. Am. Chem. Soc., Vol. 125, No. 2, pp. 554-559, 2003	
	C138	XIA, YOUNAN et al., "Complex Optical Surfaces Formed By Replica Molding Against Elastomeric Masters," Science, Vol. 273, pp. 347-349, 7/19/1996	
	C139	XIA, YOUNAN et al., "Micromolding Of Polymers In Capillaries: Applications In Microfabrication," Chem. Mater., Vol. 8, No. 7, pp. 1559-1566, 1996	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)			Complete if Known		
			Application Number	10/670,997	
			Filing Date	September 24, 2003	
			First Named Inventor	Sebastian J. Maerkl	
			Art Unit	3753	
			Examiner Name	Stephen M. Hepperle	
Sheet	13	of	13	Attorney Docket Number	20174C-009410US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	C140	XIA, YOUNAN et al., "Reduction In The Size Of Features Of Patterned SAMs Generated By Microcontact Printing With Mechanical Compression Of The Stamp," Adv. Mater., Vol. 7, No. 5, pp. 471-473, 1995	
	C141	XIA, YOUNAN et al., "Soft Lithography," Angew. Chem. Int. Ed., Vol. 37, pp. 551-575, 1998	
	C142	XU, BING et al., "Making Negative Poisson's Ratio Microstructures By Soft Lithography," Adv. Mater., Vol. 11, No. 14, pp. 1186-1189, 1999	
	C143	YANG, T. J. et al., "An Apertureless Near-Field Microscope For Fluorescence Imaging," Applied Physics Letters, Vol. 76, No. 3, pp. 378-380, 01/17/2000	
	C144	YANG, XING et al., "A Low Power MEMS Silicone/Parylene Valve," Solid-State Sensor and Actuator Workshop, Hilton Head Island, South Carolina, 4 pages, 6/7-11/1998	
	C145	YANG, XING et al., "A MEMS Thermopneumatic Silicone Membrane Valve," IEEE 10th Annual International Workshop of Micro Electro Mechanical Systems, Nagoya, Japan, pp. cover, 114-118, 1/26-30/1997	
	C146	YAZDI, NAVID et al., "Micromachined Inertial Sensors," Proceedings of IEEE, Vol. 86, No. 8, pp. 1640-1659, 8/1998	
	C147	YOUNG, A. M. et al., "Contoured Elastic-Membrane Microvalves For Microfluidic Network Integration," Journal of Biomechanical Engineering, Vol. 121, pp. 2-6, 2/1999	
	C148	ZENGERLE, R. et al., "A Micro Membrane Pump With Electrostatic Actuation," Micro Electro Mechanical Systems '92, Travemünde, Germany, pp. 19-24, 2/4-7/1992	
	C149	ZENGERLE, R. et al., "Performance Simulation Of Microminiaturized Membrane Pumps," 7th International Conference on Solid-State Sensors and Actuators, Yokohama, Japan, pp. 2 cover pages, 106-109, 6/7-10/1993	
	C150	ZHAO, ZHAN, et al., "An Integrated Biochip Design And Fabrication," Proceedings of SPIE, Vol. 4936, pp. 321-326, 2002	

60614391 v1

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.